

COMMONWEALTH OF MASSACHUSETTS

SUFFOLK, ss.

BUILDING CODE APPEALS BOARD
DOCKET NO.: 11-965

UMASS Amherst,
Appellant

v.

State of Massachusetts,
Appellees

BOARD'S RULING ON APPEAL

Introduction

This matter came before the State Building Code Appeals Board ("Board") on appellant's appeal filed pursuant to G.L. c.143, §100 and 780 CMR 122.1. In accordance with 780 CMR 122.3 the appellant petitioned the Board to grant variances based on the Seventh Edition of the Massachusetts State Building Code ("Code"). For the following reasons, the variances are hereby **GRANTED**.

The appellant requested that the Board grant a variance from 780 CMR Sections 707.10, 716.5.3.1, 907.9.1, and 907.9.2. Harold Cutler, building code consultant for the project and James McCormack Jr. appeared on behalf of the appellant. No building official was present but the fire official submitted an email stating no objection to the granting of the variance and the building official also told the Clerk he had no objection. All witnesses were duly sworn.

Procedural History

The Board convened a public hearing on January 18, 2011, in accordance with G.L.c. 30A, §§10 & 11; G.L.c. 143, §100; 801 CMR 1.02; and 780 CMR 122.3. All interested parties were provided with an opportunity to testify and present evidence to the Board.

Findings of Fact

The facts of this matter are largely not in dispute. Instead, this matter turns on the review of the applicable provisions of the State Building Code. The Board bases the following findings upon the testimony presented at the hearing. There is substantial evidence to support the following findings:

1. The property at issue is located at 611 North Pleasant Street, Amherst, MA.
2. The subject property is the Morrill Science Center at UMASS Amherst.
3. The Morrill Science Center is comprised of 4 sections in 2 buildings.
4. This appeal relates to Morrill 1.
5. Morrill 1 has a "vivarium," an animal facility in its lowest level, with a large auditorium above it.
6. The area in question is not open to the public.

Exhibits

The following Exhibits were entered into evidence at the hearing on this matter and reviewed by the Board:

Exhibit 1: Application for Appeal.

Exhibit 2: Email of Support from Assistant Chief Donald McKay dated January 13, 2011.

Analysis

A. Jurisdiction of the Board

There is no question that the Board has jurisdiction to hear this case. The governing statute provides that:

Whoever is aggrieved by an interpretation, order, requirement, direction or failure to act by any state or local agency or any person or state or local agency charged with the administration or enforcement of the state building code or any of its rules and regulations, except any specialized codes as described in section ninety-six, may within forty-five days after the service of notice thereof appeal from such interpretation, order, requirement, direction, or failure to act to the appeals board. G.L. c.143, §100.

The issues giving rise to this matter directly implicate provisions of the Code. As such, this Board has jurisdiction to decide this case pursuant to G.L. c. 143, §100.

B. State Building Code requirements

The issue is whether to grant variances regarding the fire alarm systems and the mechanical duct system to the subject property. Both variances are requested based on the fact that the lowest level of the building contains a vivarium. The appellant noted that a similar variance was requested and granted for a new laboratory sciences building at UMASS Amherst.

Fire Alarm System

The applicable regulations require visible and audible alarm notification appliances in a building such as this one. See 780 CMR 907.9.1 and 780 CMR 907.9.2. The issue is whether to grant a variance to allow an alternative type of alarm system in the vivarium.

The appellant testified that the concern with a standard fire alarm system is that loud noises and bright light significantly disturb the animals in these types of facilities. The appellant's proposed alternative for a fire alarm system in the vivarium is a "mouse tone" fire alarm which is audible but at a lower tone than the normal range for fire alarms. The appellant also proposed as an alternative to the use of strobes to use a red sign board saying "fire" or "evacuate." The appellant proposed that in Zone 1 where the animals are actually housed that there would be no audible alarm and only a message sign board. The appellant proposed that at the next level, Zone 2, using the red message sign board and a mouse tone audible alarm and at Zone 3 to have the mouse tone and standard strobes. The appellant also asserted that standard horns and strobes will be used in all other parts of the

building. The appellant stated that these types of alarm systems are becoming standard practice in many laboratory facilities.

Because of the unusual circumstances and because the building and fire officials have no objection, these variances may be granted.

Air Duct/Mechanical

The second issue relates to whether the appellant must install fire and smoke dampers in a single supply air duct from the 4th floor mechanical room to an “ABSL3 clean room” in the vivarium area. The relevant regulations state, “Penetrations of a shaft enclosure by ducts and air transfer openings shall comply with 780 CMR 712.0 and 716.0.” 780 CMR 707.10, and “Shaft enclosures that are permitted to be penetrated by ducts and air transfer openings shall be protected with approved fire and smoke dampers installed in accordance with their listing.” 780 CMR 716.5.3.1.

The appellant testified that this duct is arranged like this so that the clean room is supplied with very clean air. The appellant stated that this duct has to be sterilized occasionally, that it is connected to fans with emergency power to ensure that the space is maintained with the rules for clean rooms. The appellant stated that there are other exhaust systems serving other parts of the vivarium which are connected directly to the roof and therefore comply with the Code. Additionally, the appellant testified that a mechanical engineer told them the ducts are welded and that although it is occasionally sterilized with a gaseous agent that it is not a certain process and that fire dampers with folded coils and hidden components make it even more difficult as well as making it difficult to test those hidden spaces for bacteria.

Because there was no objection from the fire and building departments, the variance may be granted.

Conclusion

A motion was made by Jacob Nunnemacher and seconded by Doug Semple to **GRANT** a variance of Section 907.9.1 and 907.9.2 due to the unusual circumstances and the fact that both the building inspector and fire official are not opposed.

A motion was made by Doug Semple and seconded by Jacob Nunnemacher to **GRANT** a variance of 707.10 and 716.5.3.1.

Jacob Nunnemacher

Brian Gale

Doug Semple

Any person aggrieved by a decision of the State Building Code Appeals Board may appeal to Superior Court in accordance with G.L. c.30A, §14 within 30 days of receipt of this decision.

DATED: February 8, 2011